



US 20210311542A1

(19) **United States**(12) **Patent Application Publication** (10) **Pub. No.: US 2021/0311542 A1**
BROWN et al. (43) **Pub. Date: Oct. 7, 2021**(54) **PHYSICAL GESTURE BASED DATA
MANIPULATION WITHIN A VIRTUAL
SCENE FOR INVESTIGATING A SECURITY
INCIDENT**(71) Applicant: **MICROSOFT TECHNOLOGY
LICENSING, LLC**, Redmond, WA
(US)(72) Inventors: **Benjamin BROWN**, Seattle, WA (US);
Mohamed ROUATBI, Redmond, WA
(US); **Jeffrey Scott SHAW**, Cheltenham
(GB)(21) Appl. No.: **16/839,062**(22) Filed: **Apr. 2, 2020****Publication Classification**(51) **Int. Cl.**
G06F 3/01 (2006.01)
G06T 11/00 (2006.01)
G06F 3/0488 (2006.01)
G06F 3/0486 (2006.01)
G06F 16/245 (2006.01)
H04L 29/06 (2006.01)(52) **U.S. Cl.**CPC **G06F 3/011** (2013.01); **G06T 11/00**
(2013.01); **G06F 3/04883** (2013.01); **H04L**
63/10 (2013.01); **G06F 16/245** (2019.01);
H04L 63/1425 (2013.01); **H04L 63/1441**
(2013.01); **G06F 3/0486** (2013.01)(57) **ABSTRACT**

Disclosed herein is a system for facilitating fast and intuitive investigations of security incidents by responding to physical gestures performed by security analysts within a virtual scene. A query triggers an alert for detecting security incidents that occur with respect to computing resources. Following the alert, the security analyst dons a Near-Eye-Display (NED) device and is presented with a virtual scene having control elements representing various data sets and/or data analysis operations relevant to a security incident. The security analyst investigates the security incident by performing hand motions to “grab-and-drag” control elements representing data sets. The security analyst may also perform hand motions to “tap on” control elements that represents a data analysis operation. Responsive to the hand motions, the system performs data analysis operations and displays a result within the virtual scene. Then, the security analyst performs another hand motion to remediate any threat caused by the security incident.

